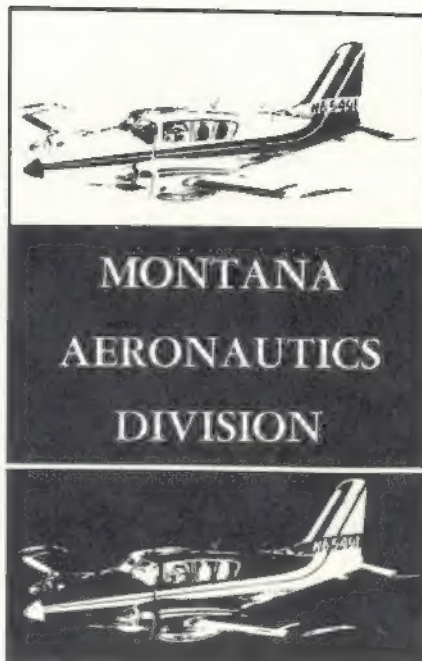




ADAP meeting participants, Miles City, January 18.



VOL. 28, NO. 3

MONTANA AND THE SKY

MARCH, 1977

## FAA PUBLISHES GENERAL AVIATION FACTS AND FIGURES

According to a new report published by the FAA, sophisticated navigation and communication equipment is the rule rather than the exception in the general aircraft fleet in the United States.

The report "General Aviation: Aircraft Owner and Utilization Characteristics," confirms that 77.7 percent of all general aviation aircraft are equipped with two-way VHF (very high frequency) radios and 76.8 percent have VHF omni range (VOR) navigation equipment.

The largest group of aircraft owners, 41.8 percent, is made up of professional, technical and similar workers, and 30.5 percent of all owners come from the ranks of managers and administrators. Craftsmen, sales and clerical workers own 18.7 percent of the country's general aviation aircraft.

The FAA points out that general aviation is the most active kind of flying in the country, far surpassing both air carrier and military. At airports with FAA traffic control services, general aviation operations—takeoffs and landings—accounted for 73.3 percent of all itinerant operations and 93.9 percent of all local operations in 1976.

For the facts about general aviation

broken down by aircraft speed, hours flown, owners, locations, avionics, even median numbers of hours flown by family income category, "General Aviation Aircraft, Owner and Utilization Characteristics" is available from the National Technical Information Service, Springfield, VA 22151 for \$7.75. When ordering use AD number AO35 144.

## NOTICE TO AIRMEN

The White Sulphur Springs Airport has deteriorated to a point where it should not be considered as a paved airport. The runway may also be soft and muddy. Pilots are advised to check field conditions before using.

## MIKE LOENING DIES IN AIRPLANE CRASH

World famous pilot Mike Loening, 44, died in the crash of his Cessna 206 single-engine aircraft February 26. Also killed in the accident were his son, Scott Loening, 20, and another passenger, according to a press release forwarded by the National Pilots Association.

At the time of his death Loening was serving a third term as President of the National Pilots Association. Besides his activities with the National Pilots Association, his career encompassed

racing, teaching, and serving as a mercy pilot. He was President of Loening Air, Inc., Boise, Idaho, holder of the Idaho "Three Million Miles" Safe Pilot Award, rated in the Grumman TBM, Consolidated PB4Y-2, Lockheed L-18, Boeing B-17 and DC-B26. He flew water-bombing aircraft and ferried smoke jumpers in fighting forest fires. He was active in search and rescue work in Idaho.

Loening was the son of famous aviation pioneer Grover Loening, who began his career working for the Wright Brothers.

## NATIONAL TRANSPORTATION SAFETY BOARD GET NEW DIRECTOR

The NTSB has advised us that Frank T. Taylor, a 35-year veteran of aviation, has been named to head the National Transportation Safety Board's Bureau of Accident Investigation.

As director of the Bureau, Mr. Taylor is responsible for all accident investigations conducted by the Board in rail, pipeline, highway, marine, and civil aviation transportation. Prior to his appointment, Mr. Taylor had directed the Bureau on an acting basis and earlier served as Chief of the

(Continued on Page 3)



**DEPARTMENT OF  
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of the  
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THURBER'S  HELENA

## **Administrator's Column**



House Bill 680, a bill to increase the aviation fuel tax three-quarters of one penny, was defeated by the legislature. This three-quarters of a penny increase was to be placed in a revolving trust fund and used solely for airport loans, grants and airborne navigational aids. All reimbursements, including interest on loans, would have gone back into the fund. Without this funding we will not be able to meet the present, nor the anticipated future, money requests. Therefore, some of the communities presently requesting these moneys will have to be placed on a waiting list, and a priority policy will be implemented based upon need.

It was most gratifying to have the Montana Pilots Association, Montana Aviation Trades Association and several interested persons testify before the Taxation Committee in support of this bill.

It was somewhat of a surprise to hear testimony in strong opposition presented by the airport managers from Helena, Great Falls and Billings, especially since these airports have received Aeronautics grants and loans totalling \$883,972.00.

I am pleased to report that the Joint Appropriations Sub-Committee on State Agencies has approved our request to be reimbursed for deficits related to airplane pool operations, which included flying the Governor.

Although this is only retroactive to July 1, 1975, it is a big step forward and I am confident that the legislature will act favorably on the committee's recommendation. Senator Bill Lowe's SB 508, passed by the 1974 legislature, provides for such reimbursement from the general fund.

House Bill 373 regarding amendments to the existing aircraft registration law, has favorably passed the House and I am optimistic that it will receive favorable Senate action.

Senate Bill 440, a bill to create a Department of Transportation, passed the Senate and is in the House State Administration Committee. You will not have this publication prior to the hearing scheduled for the 18th of March. If passed, this bill will transfer the Aeronautics Division to the newly created Department of Transportation, along with the Department of Highways, Highway Traffic Safety, Planning Division, Motor Vehicles, Highway Patrol, Transportation Specialist, Highway Commission and Public Service Commission.

In addition, the seven member Aeronautics board will be abolished. The Aeronautics Board has gone on record as opposing this bill in its present form. Members and officers of the Montana Pilots Association, Montana Aviation Trades Association and Flying Farmers met with Senator Fasbender, chief sponsor of SB440 and the Aeronautics Board on Wednesday, March 9. Strong opposition to this bill in its present form was expressed by these organizations.

We will report any House action on this bill in our next publication.

The March 11 issue of Aviation News Digest, printed by Exxon, provides the following information:

**"DEREG ACTION BY SUMMER:**  
CARTER. President Carter sent a message to Congress urging enactment of airline deregulation legislation by summer. He promised full administration cooperation. While giving no details on proposed legislation, Carter's message pointed to need for more airline competition, easing of entry restrictions, tariff-setting freedom for carriers and more freedom in dropping or expanding routes. Administration officials expected to fill in framework of their position when testifying before the Senate Commerce



**Navigational Aids Technician Frank  
Fleisner servicing an airway beacon.**



Committee hearing later this month. Carter cited recent General Accounting Office report which claimed CAB regulation artificially hikes fares 22% to 50% more than they should be. GAO report also challenged airline industry study claim that deregulation will result in serious service reductions. No administration bill will be advanced, instead Administration's opinions will be given new bill sponsored by Senators Kennedy (D-Mass.) and Cannon (D-Nev.)"

(Continued from Page 1)

#### Board's Investigation Division.

Mr. Taylor spent 19 years with Civil Aeronautics Board's Bureau of Aviation Safety. In 1967, he was named Chief, Airworthiness Branch, National Transportation Safety Board. And in 1969, he was appointed Chief of the Principal Investigations Branch.

Mr. Taylor holds private pilot and airframe and powerplant mechanic certificates. He is a veteran of World War II service in the U.S. Army Air Corps, and attended both Duke University and Parks Air College.

A resident of Ellicott City, Maryland, Mr. Taylor and his wife, Mattie, have four children—three sons and a daughter.

## MEETINGS



By: **David C. Kneidler**, Chief  
Airport/Airways Bureau

Your Aeronautics Division and the Airports District Office of the FFA jointly sponsored two meetings recently. Both were efforts to distribute critical information as quickly and effectively as possible to appropriate



Some of the participants at the meeting in Miles City, January 18.

communities and officials.

The first meeting was held in Miles City January 18 and dealt with some of the new provisions in the amended law which enables the federal government to grant money to communities for airport development purposes (ADAP). Major thrust of the meeting was to explain the section in the new law which would allow certain communities under certain circumstances to discontinue or abbreviate their present airport security measures. Communities which could be affected by this new provision are basically those served presently on Frontier Airlines Twin Otter routes. Among those in attendance were FAA's regional Director of Security and the Director of Security for Frontier Airlines, both from Denver. Also present were representatives from most communities involved in addition to personnel from both the Aeronautics Division and the FAA's Airport District Office. Other topics of discussion centered around eligibility criteria for snow removal equipment and terminal buildings under the new ADAP program.

The second meeting was held in Billings on February 24 and was called to discuss the inadequacy of funding levels in the federal grant-in-aid

program for airport development (ADAP). Grant applications on hand, in addition to known interest of other communities, made it obvious that

needs would far exceed available money, not only for FY77 but also FY78 and possibly FY79. Accordingly, the Aeronautics Division and FAA jointly spent considerable time evaluating the needs of each location involved and established a priority system by both location and development type. In view of the impact on each community's planning and budget it was critical to advise everyone of the problem and resulting priorities list. The meeting was successful in doing this, although some communities went away somewhat disappointed and others pleased at their position on the list.

It is our judgement that this predicament will probably get worse before it gets better. It is further complicated by word just received that House Bill 680, which was our attempt to secure additional money for airport development purposes through a three-quarter cent per gallon fuel tax increase, has been killed on the floor of the House. One hundred percent of this increase would have been used for loans, grants and navigational aids. It is most discouraging to note that many of the votes AGAINST came at the hands of representatives from many of the communities which have applied for airport development loans. This is not to mention the additional votes AGAINST received from representatives of communities which currently have airport loans outstanding. It seems we aviation people don't do our homework very well.



## VO-TECH BOYS STUDY TURBINES

By: Kermit Anderson

The Highway Department's Aero Commander 680-W, with Air Research turbine engines, does more things than carry state employees, fly aerial photo runs and lug a wide variety of supplies and equipment in and out of state. It also serves as an up-to-the-minute teaching aid. For example, the flurry of activity early in February in front of the red hangar just east of the Aeronautics Division's office and hangars was caused by a student assembly from William R. Chambers' class in powerplants held at the Helena Vo-Tech on the airport.

Chambers explained that at the end of a concentrated two-weeks' service training session—the boys are in the turbine engine phase—they move over to the Aero Commander hangar and, with an assist from Swede Lindgren, Highway Pilot, examine the uncowed engines in detail, checking service manuals as they go.

The aircraft then is tugged out to the ramp area where the students are given a demonstration of start-up, run-up, and shut-down procedures.

The course is possible, Chambers said, because of the Aero Commander's availability for such study. In order to buy a turbine for class use, the school would have to spend not less than \$11,000 for a run-out engine—a junker.

The boys involved are: William Abel, Jim Horinek, Larry Nelson, Jason Norskog, Jim Stoltz, Terry Wayman, Wesley Wilcox, Gary Lindsay, Dean Tanner, Mike Noziska, Joe Gibson, Edward Ulmer and Roger Tauck.

### PILOT AIDS

Montana Aeronautical Chart.. \$2.00

Montana Airport Directory:

Loose leaf binder ..... \$1.00

Insert..... \$1.00

Subscription—

Monthly Newsletter..... \$1.50

Montana is sometimes known as a "50,000 mile trout stream" with eight nationally-known blue ribbon trout streams. Rainbow and brook trout are plentiful . . . with other species such as Dolly Varden, brown, cutthroat and grayling.







## CENTERLINE



By: **Jim White**, Chief  
Air Transportation Bureau

### **FAA CONVERTS CHART CODES.**

The FAA has begun to replace the geographic names of all airway reporting points and fixes with five letter, pronounceable codes. Most of the changes on enroute charts have already been made, and work is underway at this time revising approach and departure plates.

Under the old system pilots used the geographical name to identify intersections, and ATC used an alphanumeric computer code. When a pilot filed a flight plan using the chart name, the air traffic controller had to convert the longer name to a three-character computer code before processing it. This was time consuming and susceptible to error.

In the new system, the Chart name and computer code will be the same, chart clutter will be reduced, and there will be less possibility of error. AUDUBON has been changed to BIR-DI, WOODS HOLE has become WOR-MY, and APPLE SPRINGS is now JUICE.

### **NTSB, FAA SET GUIDELINES FOR ACCIDENT INVESTIGATIONS**

NTSB and FAA have approved new guidelines for determining which agency will investigate various types of aircraft accidents. Under the new agreement, FAA usually will investigate "all civil aircraft accidents involving rotorcraft, aerial application, amateur-built aircraft, restricted category aircraft and all fixed-wing aircraft which have a certificated maximum gross takeoff weight of 12,500 pounds or less", unless the NTSB decides to handle the investigation itself. FAA also will investigate fatal accidents involving aerial application,



amateur-built aircraft and restricted category aircraft operations, but NTSB will normally investigate all other fatal accidents and all accidents involving Part 135 operators, certified carriers and midair collisions. NTSB will continue to determine the probable cause of all U.S. civil aviation accidents.

#### **AVIONICS AFFECT CALCULATORS**

You've probably heard that electronic pocket calculators in the cockpit can interfere with avionics. Now comes a Flight Safety Foundation advisory warning that aircraft electronics can interfere with the functioning of pocket calculators.

FSF recommends that, where a calculator is used in cockpit for vital navigation or fuel remaining functions, the user should periodically run through a test calculation with a known answer to insure correct computation. Try this one: Multiply 12345678 times .09. The answer should be seven ones and a decimal point (1111111.).

#### **FAA PILOT PHYSICAL STANDARDS CRITICIZED**

The general Accounting Office, which is an arm of Congress, has criticized the FAA's medical examination standards for pilots and has called for a number of more stringent examinations and procedures. The GAO charged that from 1965 to 1975 there were 600 accidents due to pilot death or an incapacitation from physiological or psychological factors.

The NTSB has issued four recommendations to the FAA because of "problems regarding the medical certification procedures of airmen" found during their investigation of recent accidents.

One problem singled out for attention was the unreliability of hearing tests conducted by medical examiners. The board said "the current method of using the medical examiner's whispered voice to test an applicant's hearing cannot assure validity." It recommends that "all applicants for first and second-class medical certificates be administered periodically an audiometric hearing test."

Do you know where the only physical evidence exists of the Lewis and Clark Expedition? It's in Montana just off Interstate 94 near Billings. Captain Clark scratched his name on a giant rock . . . Pompeys Pillar on July 25, 1806. It's still visible today.

## **AIRPORT MAINTENANCE SEMINAR TO BE HELD**



**By: Ted Mathis**

The Montana Aeronautics Division with the cooperation of the FAA Airports Division, will sponsor an airport maintenance seminar on Wednesday and Thursday, April 6 and 7, 1977. The seminar will be held at the Elks Club meeting room in Glasgow.

Noted authorities and industry representatives will give presentations on such topics as airport paving and repair, installation and repair of airport lighting systems, construction and maintenance of turf runways and many others.

A detailed schedule of the seminar and a registration form are published elsewhere in this issue.

Anyone involved in airport maintenance is welcome, so why not plan to attend.

## **MONTANA AERONAUTICS DIVISION AIRPORT MAINTENANCE SEMINAR SCHEDULE April 6 & 7, 1977**

### **WEDNESDAY, April 6**

- 0945-1000 Registration at the Elks Club meeting room in Glasgow
- 1000-1100 Grasses suitable for turf runways, Airport Week Control (Valley County Extension Service)
- 1100-1200 Maintenance of Turf Runways (Vern Moody, Montana Aeronautics Division)
- 1200-1330 LUNCH (No-host)
- 1330-1430 Airport Lighting Maintenance (Will Koliha, F.A.A. Denver)
- 1430-1500 Coffee Break
- 1500-1600 Airport Beacon Maintenance (F.A.A. and Aeronautics Division)

### **THURSDAY, April 7**

- 0900-1000 Asphalt Paving Maintenance and Repair (Earl Angell, The Asphalt Institute)
- 1000-1030 Coffee Break
- 1030-1130 Reclamite Pavement Treatment (Gene Claussen, Golden Bair Corporation)
- 1130-1300 LUNCH (No-Host)
- 1300-1330 Airport Maintenance Update (F.A.A. Airports, Helena)
- 1330-1500 Rubberized Pavement Crack Sealers and Associated Products (Bill Brake, Sahuaro Petroleum Company) (Carl Jacobsen, J. W. J. Contracting)
- 1500 Adjourn



## "PILOT ERROR"

By: Dale Uppinghouse

Accident Prevention Specialist  
FAA Rocky Mountain GADO-1

About 20 years ago there was a rather smug air taxi pilot who checked out in an Apache. The pilot didn't need a full checkout. He was a hot rock. A regular smoldering boulder. A quick scan through the handbook, an engine shut-down in level flight, a couple of stalls, and he was ready to go.

Shortly thereafter, this pilot departed Denver one dark night and headed north. A roughness developed, followed by a thud. The left prop was standing still, straight across, unfeathered. The crankshaft was broken. This make of propeller would not feather unless it was rotating.

With full power on the right engine, the rate of sink was 100 feet per minute but the lights of Cheyenne were dimly visible up ahead. The pilot set up an airspeed of 115 indicated. This was about 20 m.p.h. too fast, and the Apache had settled to 6,500 ft. as he turned final. Cheyenne Airport is 6,156 ft. M.S.L.

The engine driven hydraulic pump for the standard Apache is on the left engine (same as on the Aztec). With the left engine frozen tight, the landing gear had to be pumped down by the emergency system. Give him one point. The pilot remembered that the gear had to be pumped down or else blown down by an air bottle located in a difficult place. What he didn't know was how long it took to pump the gear down. He remembered someone saying that it took fourteen strokes of the emergency pump handle to lower the gear. Fourteen pumps didn't do the job and he was still pumping when he flared to land. He learned later (by reading the book carefully and by actually pumping the gear down in a training session) that 40 strokes of the handle were required.

The Apache skidded to a stop on the belly. As is usually the case, a crowd soon gathered around to hear all the details. One member of the crowd wasn't too impressed with the pilot's story of why he hadn't lowered the gear. He was the C.A.A. Inspector.

The Apache could have arrived over the airport with plenty of altitude had it been flown at the proper single engine speed (VYse). The pilot would have had ample time to lower the gear and could have started pumping earlier had he known how many strokes of the hand

pump were necessary.

The accident happened because of pilot stupidity. He was too lazy and too proud to learn everything about that airplane before carrying passengers. I know this to be a fact. I was the pilot. You may not live long enough to make all the mistakes. Learn from the mistakes of others (such as mine, for instance).

## FAA ITINERARY FOR MONTHS OF APRIL, MAY, JUNE, 1977

BILLINGS GADO		Phone: (406) 245-6719/70		
City	Airport	APR.	MAY	JUNE
Glasgow	Municipal	5	10	7
Miles City	Municipal	19	24	21
HELENA GADO		Phone: (406) 449-5270		
City	Airport	APR.	MAY	JUNE
Bozeman	Gallatin Field	20		22
Great Falls	International	6		8
Havre	City-County		4	
Kalispell	International		18	
Missoula	Johnson-Bell	13	11	15

## CONGRATULATIONS



## FAA CERTIFICATES ISSUED RECENTLY TO PILOTS

### STUDENT

John C. Gurley, Billings

### PRIVATE

Richard J. Markle, Glasgow  
Karl A. Waitschies, Peerless  
Donald W. Trower, Scobey  
Monty G. Runge, Belfield, ND  
Bill G. Holloway, Two Dot  
Stephen P. Robinson, Billings  
Scot K. Robinson, Powderville  
Mary M. Green, Volberg  
Harvey W. Roepke, Miles City  
Roy M. Solberg, Gildford  
Joe O. Luckman, Great Falls  
Maria A. Marozzo, Libby  
Roger Toshiaki Ito, Havre  
Calvin P. Thompson,

### Great Falls

Gerald L. Grabofsky, Havre  
Michael M. Mamuzich, Conrad  
H. Grant Pribanic, Bozeman  
Vester A. Wilson II, Hamilton  
James S. DeWitt, Wolf Point  
Derald D. Hauck, Missoula  
James S. Werter, Flushing, NY  
Andy R. Skinner, Helena  
Rod W. Utigard,

Chicago, IL

William Hamilton, Helena  
James E. Love, Kalispell  
Lloyd M. Evans,

Lethbridge, Alta. Canada  
Roger J. Lee, Wolf Point  
Ross W. Ritter, Rudyard

### MULTI ENGINE

Eric J. Brabeck, Bridger  
Michael J. Barovich, Billings  
Paul A. Ricci, Missoula  
William J. Morris, Missoula  
Frank R. McDowell, Wisdom

### INSTRUMENT

Richard L. Trang, Billings  
Jerry L. McLaughlin, Bozeman  
James S. Simpson, Bozeman  
David F. Blair, Missoula  
Roger F. Schulze,  
Kalispell

### FLIGHT INSTRUCTOR

Ralph S. Young, Billings  
Martin V. Lau, Missoula  
Daniel K. White, Hamilton  
Robert W. VanMeter, Clancy  
Thomas Armstrong, Great Falls  
Jeffrey G. Butcher, Missoula  
James L. Thomas, Kalispell  
William T. Winninghoff,  
Phillipsburg

Walter E. Malone, Miles City  
Michael L. Stockhill, Kalispell

### AIRLINE TRANSPORT PILOT

George R. Knutson, Billings  
Michael L. Stockhill,  
Kalispell

### COMMERCIAL

Terry L. Self, Pinson, AL  
Patrick E. MacDougall,  
Alberta, Canada



## CALENDAR

**April 6-7, 1977**—Montana Airport Maintenance Seminar, Glasgow Airport, Glasgow.

**May 19-20, 1977**—Montana Aeronautics Board Meeting.

**May 22, 1977**—Flying Farmer Queen's Fly-In, Leininger Home, Lewistown.

**June 12, 1977**—MPA Fly-In, Double Arrow Ranch, Seely Lake.

**June 17-19, 1977**—Montana Pilots Association Annual Convention, Helena.

**June 26, 1977**—Flying Farmer President's Fly-In, Strouf Home, Moccasin.

**July 16-17, 1977**—Combined MPA-Flying Farmer Fly-In, Schafer Meadows.

**Sept. 30-Oct. 1, 1977**—Montana Flying Farmer Convention, Billings.

## AIRPORT MAINTENANCE SEMINAR

### REGISTRATION FORM

YES, I PLAN TO ATTEND THE SEMINAR.

NAME(s): \_\_\_\_\_

REPRESENTING \_\_\_\_\_

Send Registration to: MONTANA AERONAUTICS DIVISION  
P. O. Box 5178  
Helena, Montana 59601  
(406) 449-2506

PLEASE REGISTER BEFORE MARCH 28, 1977

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#### NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE—"To foster aviation, as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in **research, development, and advancement of aviation**; to develop uniform laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."



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